

COMMUNITY ON-LINE INTELLIGENCE
SYSTEM FOR END USERS AND MANAGERS
(COLISEUM)

**REQUIREMENTS DEFINITION
DOCUMENT
(RDD)**

CDRL D004

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COLISEUM Requirements Definition Document
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1.0 GENERAL.

1.1 Purpose and Objective of the Requirements Definition Document.

The purpose of this Requirements Definition Document (RDD) for the Community On-line Intelligence System For End-Users And Managers (COLISEUM) is to list and define those data elements required by the system in order to be responsive to the functional requirements of the user community. Additionally, this document describes the data collection requirements and scope, and captures the high-level functional user requirements associated with the Department of Defense (DoD) Intelligence Production Program (DoDIPP) procedures.

The objective of this RDD is to ensure that the system/functional requirements being captured satisfy the needs of all participants assisting in defining the requirements for an automated support system, including managers, analysts, and requestors who will ultimately depend on the automated system for registering, validating, assigning, and managing intelligence production.

1.2 Project References.

This project was implemented under task number 3.1.2.2.1.1, of the Command Management Information Systems (CMIS) contract, MDA903-91-C-0013. It is a distinct task within the CMIS contract and does not interface with any other portion of the contract.

COLISEUM is being developed to function as an application on the Joint Deployable Intelligence Support System (JDISS) platform. This approach will allow connectivity and interoperability with other intelligence systems required to support users during peacetime, crises, and wartime. The COLISEUM user will therefore have access to an integrated community-wide intelligence support system for requesting, validating, deconflicting, assigning, and monitoring/assessing intelligence production.

This project was initiated to satisfy a need expressed by the Intelligence Community (IC) for an automated information system (AIS) which will provide a responsive, user-friendly means for capturing and managing production requirements and production scheduling. Legacy systems in use by the commands and services have been satisfying the basic requirements of a limited number of organizations, but no one system has been able to achieve an operational capability that satisfies a total community need due to ongoing functional changes in the DoD intelligence production process. Of those systems being used within the community to perform production management, the Army's Automated Requirements Management System (ARMS) was identified as having the functionality which satisfied existing basic requirements for a requirements management system. To implement a standardized automated capability throughout the IC it was determined by the National Intelligence Producers Board (NIPB) and the National Military Intelligence Production Center (NMIPC) that the most flexible approach would be to capitalize on the functionality developed for ARMS. Capturing this functionality in COLISEUM and expanding on previously defined user interfaces and database architectures facilitates a rapid development methodology for a Department of Defense Intelligence Information System (DoDIIS) compliant, community-standard hardware, software and communications environment.

PROJECT DOCUMENTS:

A. DoDIIS DOCUMENTS

1. DoDIIS Migration Systems Program Management Plan (PMP), September 1994, DoDIIS Management Board, SIMO, DIA.
2. DoDIIS Migration Systems Instructions to DExAs, PMOs, and Developers, November 1994, DoDIIS Management Board, DIA.
3. DoDIIS Profile of the DoD Technical Reference Model for Information Management, September 1993, DoDIIS Management Board, DIA.

4. DoDIIS Dissemination Concept of Operations, 17 April 1993, DIA.
5. DMB DoDIIS Configuration Management Plan, 22 April 1993, DIA.
6. DoDIIS Site Transition Methodology, 22 April 1993, DoDIIS Management Board, DIA.
7. DoDIIS Management Board Concept of Operations (DMB CONOPS), 3 December 1992, DoDIIS Management Board, DIA.
8. Defense Intelligence Agency (DIA)/S-FM Memorandum, Subject: DoDIIS Migration Systems, 7 February 1994.
9. DoDIIS Developer's Guide for Automated Information Systems (AIS) Security in DoD Intelligence Information Systems, SC-2610-142-93, November 1993, DIA.
10. DoD Site Certifier's Guide, SC-2610-143-93, November 1993.
11. DoDIIS Style Guide, October 1991, DoDIIS Management Board, DIA.
12. DoDIIS Site Information Systems Security Officer's Handbook, SC-2610-141-93, November 1993.
13. Data Element Standardization Procedures, DOD 8320.1-M-1.

B. OTHER GOVERNMENT DOCUMENTS

1. Principles of Understanding (POU) between the National Intelligence Council (NIC), Production Group, and National Intelligence Producers Board (NIPB), and Defense Intelligence Agency, National Military Intelligence Production Center (NMIPC) for establishing a National Intelligence Producers Board (NIPB) Management Information System (MIS) Program Executive Agent, Undated (FOUO).
2. National Intelligence Council Memorandum For National Intelligence Producers Board Principals, 4 March 1994, Subject: Minutes of the Meeting of the National Intelligence Producers Board on 1 March at 1400 (OUO), (FOUO).
3. DoD Human-Computer Interface (HCI) Style Guide, Version 3.0, DoD Technical Architecture Framework for Information Management, Volume 8, 30 September 1993, Defense Information Systems Agency.

4. DoD-0000-151-94 Defense Intelligence Management Document: DoD Intelligence Production Program.
5. DoD-0000-151C-95 Defense Intelligence Management Document: DoD Intelligence Production Program: Production Procedures, February 1995.
6. J2-JIC Memorandum, Subject: NMJIC Functional Requirements for the DoDIMS RFI Module, 3 February 1994.
7. J2-JIC Draft Memorandum for Record, Subject: NMJIC Comments on DoDIMS PR Module, 22 December 1993.
8. DoDIMS Concept of Operations (CONOPS), 31 August 1994.
9. Project Management Plan for the Community On-Line System For End-Users and Managers, J.G. Van Dyke & Associates, Inc., 30 July 1994).
10. Functional Requirements for the Intelligence Community's Production Management and Information System (MIS), National Intelligence Producers Board (NIPB), 14 December 1993.
11. ASD/C3I Memorandum, Subject: Defense Intelligence Systems Management, 31 October 1991.
12. ASD/C3I Study, Intelligence Production Requirement: An Examination of the Timeliness, Accountability, and General Health of the System, June 1992.
13. DIA Requirements for an Automated Tasking System: Today and Tomorrow, W. Uthe, B. Hennigan, L. Gould, and D. Brilliant Jr., 17 June 1993.
14. Doctrine For Intelligence Support To Joint Operations, Joint Pub 2-0.

C. APPLICABLE SUPPORTING DOCUMENTS

1. Contract MDA903-91-C-0013 (with modification), Directorate of Contracting Operations, IACON-DCO-B, United States Army Intelligence and Security Command, Fort Belvoir, VA.
2. DoDIMS Production Requirement (PR) Process Validation, 14 February 1994, J.G. Van Dyke & Associates, Inc.
3. DoDIMS Product Evaluation, 17 March 1994, J.G. Van Dyke & Associates, Inc.

4. DoDIMS Requirements Definition Document (RDD), 17 March 1994, J.G. Van Dyke & Associates, Inc.
5. DoDIMS High Level Functional System Design Document (SDD), 17 March 1994, J.G. Van Dyke & Associates, Inc.
6. DoDIMS/COLISEUM Requirements Definition Document (RDD), 30 September 1994, J.G. Van Dyke & Associates, Inc.

1.3 Terms and Abbreviations.

Below is a list of acronyms, terms, and definitions used in this document.

<u>ACRONYM/TERM</u>	<u>DEFINITION</u>
ADP	Automated Data Processing
AIS	Automated Information System
ARMS	Automated Requirements Management System
ARMY	U.S. Army
ASDIA	All Source Document Index
ATS	Automated Tasking System
CCB	Configuration Control Board
CDIP	Council of Defense Intelligence Producers
CDRL	Collateral Recurring Document Listing
CIA	Central Intelligence Agency
CMST	Collection Management Support Tool
CM	Configuration Management
CMIS	Command Management Information System
COINS	Consolidated On-line Intelligence System
COLISEUM	Community On-line Intelligence System For End Users and Managers
CONOP	Concept of Operations
COTR	Contracting Officer's Technical Representative
COTS	Commercial Off-The-Shelf
CRF	Change Request Form
CSE	Client Server Environment
DBA	Database Administrator
DBMS	Database Management System
DCSINT	Deputy Chief of Staff for Intelligence
DIA	Defense Intelligence Agency
DIDS	Defense Intelligence Dissemination System
DIMAS	Defense Intelligence Mail Automation System
DIPC	Defense Intelligence Production Council
DIPS	Defense Intelligence Production Schedule
DISN	Defense Intelligence Secure Network
DITDS	Defense Intelligence Threat Data System
DMB	DoDIIS Management Board
DoD	Department of Defense
DoDIIS	Department of Defense Intelligence Information System
DoDIPC	Department of Defense Intelligence Producers Council
DoDIPP	Department of Defense Intelligence Production Program

DSN	Defense Switch Network
DSNET	Defense Integrated Secure Network
EDMS	Electronic Dissemination Management System
EMERALD	Counternarcotics Database System
ERC	External Research Contracts
FD	Functional Description
FOC	Final Operational Capability/Full Operational Capability
FOUO	For Official Use Only
GFE	Government-Furnished Equipment
GFS	Government-Furnished Software
GMIPP	General Military Intelligence Production Program
GOTS	Government Off-The-Shelf
GUI	Graphical User Interface
HCI	Human-Computer Interface
HOCNET	Humint Operational Communications Network
IC	Intelligence Council
ICD	Interface Control Document
IFC	Intelligence Function Code
IIR	Intelligence Information Report
IISB	Intelligence Information Systems Board
INSCOM	Intelligence and Security Command
IOC	Initial Operating Capability
JCS	Joint Chiefs of Staff
JDISS	Joint Deployable Intelligence Support System
JIC	Joint Intelligence Command
JWICS	Joint Worldwide Intelligence Communications System
LAN	Local Area Network
LTIOV	Latest Time Information Is Of Value
MAGIC	Maritime Air-Ground Intelligence Cell
MCS	Military Capabilities Study
MDEP	Management Decision Engineering Package
MIS	Management Information System
MMI	Man-Machine Interface
NATO	North Atlantic Treaty Organization

NEO	Non_Evacuation Operations
NIC	Network Interface Card
NIPB	National Intelligence Producers Board
NMIPC	National Military Intelligence Production Center
NOCONTRACT	Not Releasable to Contractors/Consultants
NOFORN	Not Releasable to Foreign Nationals
OOC	Objective Operational Capability
PMP	Project Management Plan
POC	Point of Contact
POU	Principles of Understanding
PR	Production Request/Requirement
RDD	Requirements Definition Document
RFI	Request For Information
RMS	Requirements Management System
SDR	System Design Review
SII	Statement of Intelligence Interest -- Reference documentation giving an authorized recipient's interests to receive intelligence on specific subject and geographic areas.
SMTP	Simple Mail Transfer Protocol
SQL	Standard Query Language
STIPS	Defense Scientific and Technical Intelligence Program/Schedule
TBD	To Be Determined
VADER	Video Analysis by Digitization, Enhancement and Retransmission
WAN	Wide Area Network

1.4 Modification of Data Requirements.

Requests for modifications to the data requirements will be submitted to the PMO, PO-5C, NMIPC via Change Request Forms, E-Mail, message traffic, or letter/memorandum. The modifications will then be discussed in the COLISEUM System Design Reviews (SDRs). Modifications that can be agreed upon in the SDRs will be coordinated with the community prior to final acceptance. Modifications that cannot be agreed upon in the SDRs will be referred to the COLISEUM Configuration Control Board (CCB) for resolution. It should be understood that database table definitions and field element names, definitions, and lengths are dynamic and will change as the community needs and overall production management requirements are validated and refined.

1.5 Security.

All the metadata (information about the data being stored) for COLISEUM is unclassified and requires no special security handling. COLISEUM will operate/execute in the JDISS system-high environment. COLISEUM access will be limited, at a minimum, to the access restrictions of the JDISS environment.

2.0 DATA DESCRIPTION.

This section is separated into two categories: static data and dynamic data. Static data are defined as that data used mainly for reference (pick-lists) during the system operation and are usually generated or updated in widely separated time frames independent of normal system operations. Dynamic data include all data which are intended to be updated and which are input to the system during normal operations (including "real-time" data), or are output by the system.

2.1 Logical Organization of Static System Data.

The static system data elements are arranged in alphabetical order by table in Appendix B.

2.2 Logical Organization of Dynamic Input Data.

The dynamic input data elements are arranged in alphabetical order by table in Appendix C.

3.0 USER SUPPORT FOR COLLECTING DATA REQUIREMENTS.

This section describes the user and community support needed for collecting data requirements. The requirements discussed in this document are a result of many meetings (i.e.: General Military Intelligence Production Program (GMIPP) Conference, Council of Defense Intelligence Producers (CDIP) Conference, numerous DoDIPP briefings to Commands/Services, COLISEUM System Design Reviews, In Progress Reviews, DoDIPP procedures discussions, Request For Information (RFI) coordination meetings, production center discussions, etc.) and other separately provided requirements/documentation. Some National Community requirements have been incorporated, but further coordination with the National Community is necessary. Requirements not captured in this RDD can be submitted to the COLISEUM PMO through each users respective Production Requirements Manager. The Production Requirements Manager may submit the new requirements via any means available (i.e.: message, fax, mail, etc.).

Configuration Control Board (CCB) meetings will be scheduled periodically to brief the members of the Community on the progress of COLISEUM development, to discuss any unresolved issues (such as those resulting from SDR issues), and to ensure a Community-wide consensus on the automated intelligence production process being captured in COLISEUM.

3.1 Data Collection Requirements and Scope.

This sub-section contains a description of the input device(s), the output device(s), and the frequency of update required by the developer to establish the data values of each data element.

3.1.1 Input Device(s).

Input to COLISEUM will be provided by users from their workstations, as well as the replication servers located at each node. Users will enter Production Requirement (PR) information, or production information, which will be captured first at the users' site, and then replicated to other COLISEUM servers. COLISEUM will generate electronic-mail (e-mail) notification after predetermined actions. E-mail will be addressed to the requesting user or organization. The actions which will cause e-mail to be generated will be initiated when a PR is captured and updated, when the PR is validated, when a product is assigned to satisfy the PR, and/or when the PR is closed. E-mail will also be generated to the action office responsible for a registered PR when a product is initiated or updated. The e-mail will include the PR number, subject, and other pertinent information necessary for the action office to retrieve and process the PR from the COLISEUM database. E-mail will be sent to production centers responsible for providing intelligence when the production center is assigned the PR. E-mail can also be generated by the validating office for quick response back to the requestor while reviewing or validating the PR. E-mail can also be sent to the requestor when the product is assigned or modified.

3.1.2 Output Device/Form.

The output device(s) will be color monitor(s), color postscript and black and white laser printer(s). All of the COLISEUM data elements may be presented to the user textually (ad hoc queries or reports), or graphically (ad hoc or precanned line charts, bar charts, and trend analysis) on the monitor, and/or printed.

3.1.3 Frequency of Update.

When sites update a PR (create and modify) or a product record (Production Centers), the updates are applied to the data on the local server. When updates are made to these servers, Replication Server will be utilized to replicate the predefined attributes to the Central Server and any applicable sites. Replication Server is the only process that will update the Central Server.

3.2 Data Collection and Transfer Procedures.

Data is collected from the users via input to the Production Requirement or Intelligence Product screens. The data is stored in SYBASE Standard Query Language (SQL) server tables. Predefined updates are replicated, through the use of Replication Server, to the Central Server and other sites that require the data. The Central Server can be queried to locate information on a community scope (production requirements, production requirement responses, and intelligence products.)

3.2.1 Input Formats.

This sub-section will illustrate the initial input formats (screens) created by the system. Formats will be included in a separate appendix subsequent to Initial Operational Capability (IOC)/Final Operational Capability (FOC).

3.2.2 Output Formats.

This sub-section describes all output formats (printer layout, monitor, etc.) created by the system. Formats will be included in a separate appendix subsequent to approval by SDR and CCB participants.

3.3 Database Impacts.

Database impacts and risks associated with this project focus on the intelligence production community's ability to concur on the intelligence production functional process. Other database impacts and risks overlap with JDISS associated deployment issues for distribution of the system, i.e., site architecture development, hardware/software procurement, and accreditation of site client/server initiatives. Additionally, all risks associated with the development and implementation of the IOC and FOC modules are inherently included in the overall life cycle of the project. The (first year) implementation schedule is accelerated to meet the critical requirement to satisfy the capability for

registration of quick-turnaround production requirements in support of both crisis and peacetime. The accelerated schedule for completing the first year project activities increases the risks associated with developing a DoD community consensus on the entire production process and data elements.

Additional risk is apparent in the activities involved in coordinating and scheduling requirements definition activities with the NIC and in scheduling the testing and implementation of IOC/FOC modules that won't necessarily be managed within the DoDIIS community. These risks are manifested in the fact that the communities participating in defining the requirements have different functional requirements and priorities, and maintain independent decision making bodies.

Lastly, the automation of the intelligence production process is a requirement that demands the support and synergy of a community that needs to define and validate the production process as it applies to the intelligence community overall. Although a complex undertaking, with proper coordination and honest participation by functional managers, all activities associated with this project can be accomplished. Lack of consensus in the advancement of the intelligence production process will incur major risk to the project.

APPENDICES